

**TMDL Implementation Plan for**  
**Chattahoochee River, Downstream of**  
**West Point Lake to Johnson Island**  
**-- Dissolved Oxygen**

**Introduction**

The portion of the Chattahoochee River downstream of the dam for West Point Lake, is located a short distance west and north of West Point, Georgia, which is about 25 miles north of the consolidated government of Columbus/Muscogee County, Georgia. The West Point Lake dam is operated by the U.S. Army Corps of Engineers, Mobile District. Reservoir water flows through the turbine generators in the dam to produce hydroelectric power. The water for such use is taken from the lower (hypolimnion) zone of the Reservoir where the water is naturally lower in dissolved oxygen (D.O.).

**Plan for Implementation of the TMDL**

The TMDL for this and seven other low D.O. river segments below dams, was finalized in November, 2000. The designated use for the Chattahoochee River downstream of the dam for West Point Lake, is for drinking water (after appropriate treatment at a water plant). The applicable water quality standards there for D.O. are a concentration of 5 milligrams per liter (mg/l) as a daily average and a concentration of 4 mg/l as a minimum value.

Attainment and maintenance of these two D.O. water quality standards are the goals of this Implementation Plan.

The TMDL recommends that the appropriate federal and state agencies work together in developing an implementation strategy to provide higher oxygenated water from these dam releases. The TMDL adds that these strategies may include oxygenation or aeration of the water, redesigned spillways, or other measures, and that ongoing water quality monitoring is needed to monitor progress.

It is our understanding that the Corps of Engineers does not presently have D.O. improvement measures planned for this dam. Funding of such measures must be obtained from Congressional appropriations after such a system is justified, planned, designed, and constructed. The design target for such a system would be the D.O. water quality standards (5 mg/l as a daily average and 4 mg/l as a minimum value).

EPD will work with EPA to set up periodic meetings with the Corps of Engineer on this and the other TMDL segments where river segments below Corps dams are not meeting water quality standards for D.O. This is the approach recommended in the TMDL. The purpose of this process is to seek to reach agreement on a schedule for implementing solutions on the D.O. non-compliance, to track progress on improvement measures, and to

provide input as needed, until water quality standards for D.O. are met.

A summary of the Implementation Plan is as follows.

**A. Source categories, subcategories, or individual sources which must be controlled to implement the load allocations:** Dam immediately upgradient.

**B. Description of regulatory or voluntary actions, intended to achieve reductions:** Continued monitoring at same locations, plus work with U.S. Army Corps of Engineers and EPA to develop a plan for a D.O. improvement system when power generation turbines in the dam are operating.

**C. Description of regulatory or voluntary actions, including management measures or other controls, by governments or individuals, that provide reasonable assurance that reductions will be achieved to meet water quality standards:** See previous response. D.O. improvement system design must have target of full compliance with D.O. water quality standards.

**D. Schedule for implementing the management measures or other control actions as expeditiously as practicable:** Will set up first meeting with EPA and COE as soon as feasible, and seek to obtain agreement on an implementation schedule as expeditiously as practicable.

**E. Projected attainment date and basis for it:** The projected attainment date is on or before 2010, for this Implementation

Plan, but might be later, because of lack of a present turbine upgrade project for this dam, which could include a D.O. improvement system.

**F. Measurable milestones for determining whether management measures or other control actions are being implemented:**

Continued monitoring of D.O. will be undertaken, to confirm or refine the TMDL projections. If an agreement is reached with the COE on a schedule for implementation of D.O. improvements, that schedule will include appropriate milestones.

**G. Monitoring or modeling plan designed to measure the effectiveness of the management measures or other controls, the progress the water body is making toward attainment, and a process for implementing stronger and more effective management measures if necessary:**

Periodic monitoring will be conducted using the same methodology and analytical approach as before. It is our information that management measures or other controls have not yet been developed.

**H. The criteria to determine whether substantial progress toward attainment is being made, and if not, whether the TMDL needs to**

**be revised:** The criterion is whether an agreement can be reached with the Corps, on a schedule for justifying, planning, designing, and installing a D.O. improvement system, and for obtaining Congressional funding for each of those steps.

I. Goal of attaining and maintaining the applicable water quality standards within 10 years, where that is practicable: That can hopefully be accomplished, for this segment.

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